Electronic Supplementary Material (ESI) for New Journal of Chemistry.

Supporting information

An "On-Off-On" fluorescent peptide probe for the specific detection of Cu^{2+} and S^{2-} in living cells and zebrafish

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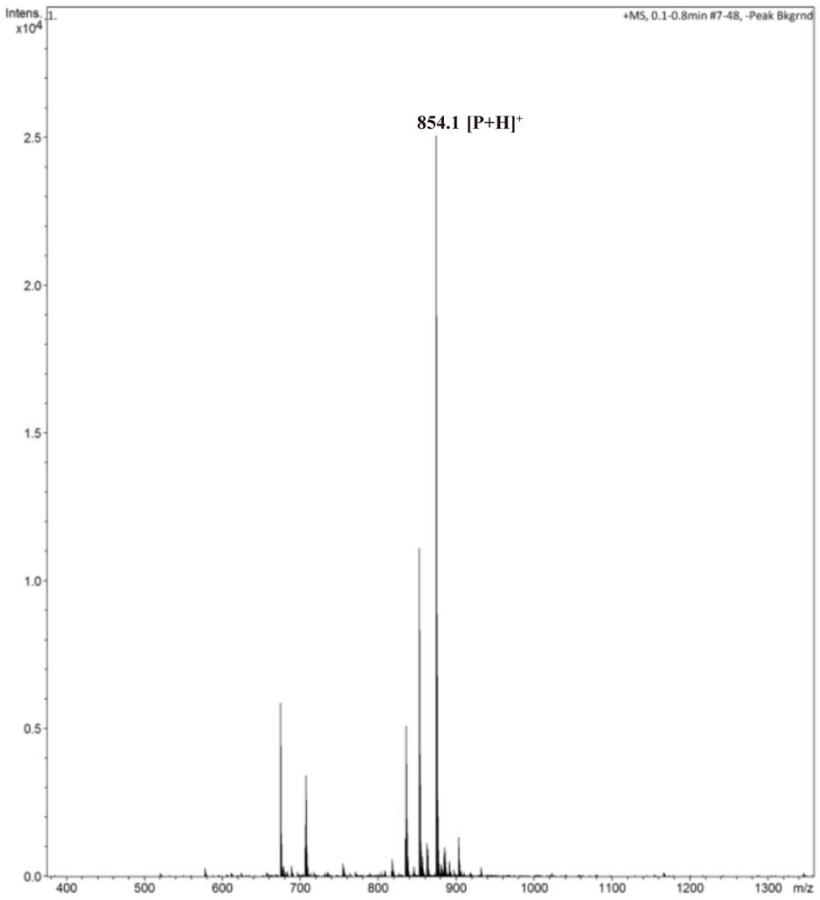

Figure S1. MS spectrum of fluorescent peptide probe P.

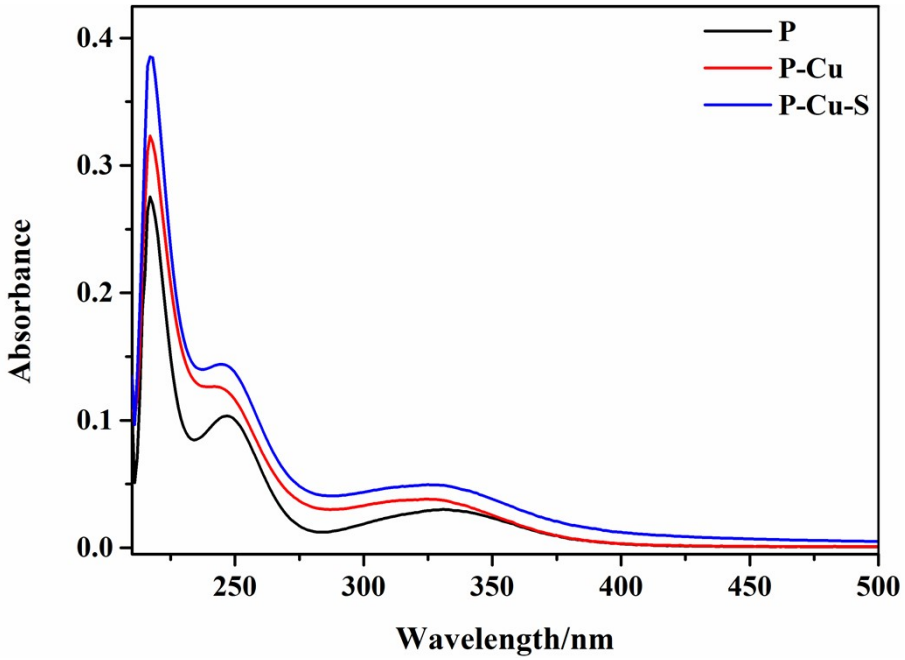

Figure S2. UV-vis spectrum of P (10 μM), P-Cu (10 μM), and P-Cu-S (10 μM) in 10 mM HEPES buffer solution at pH 7.4.

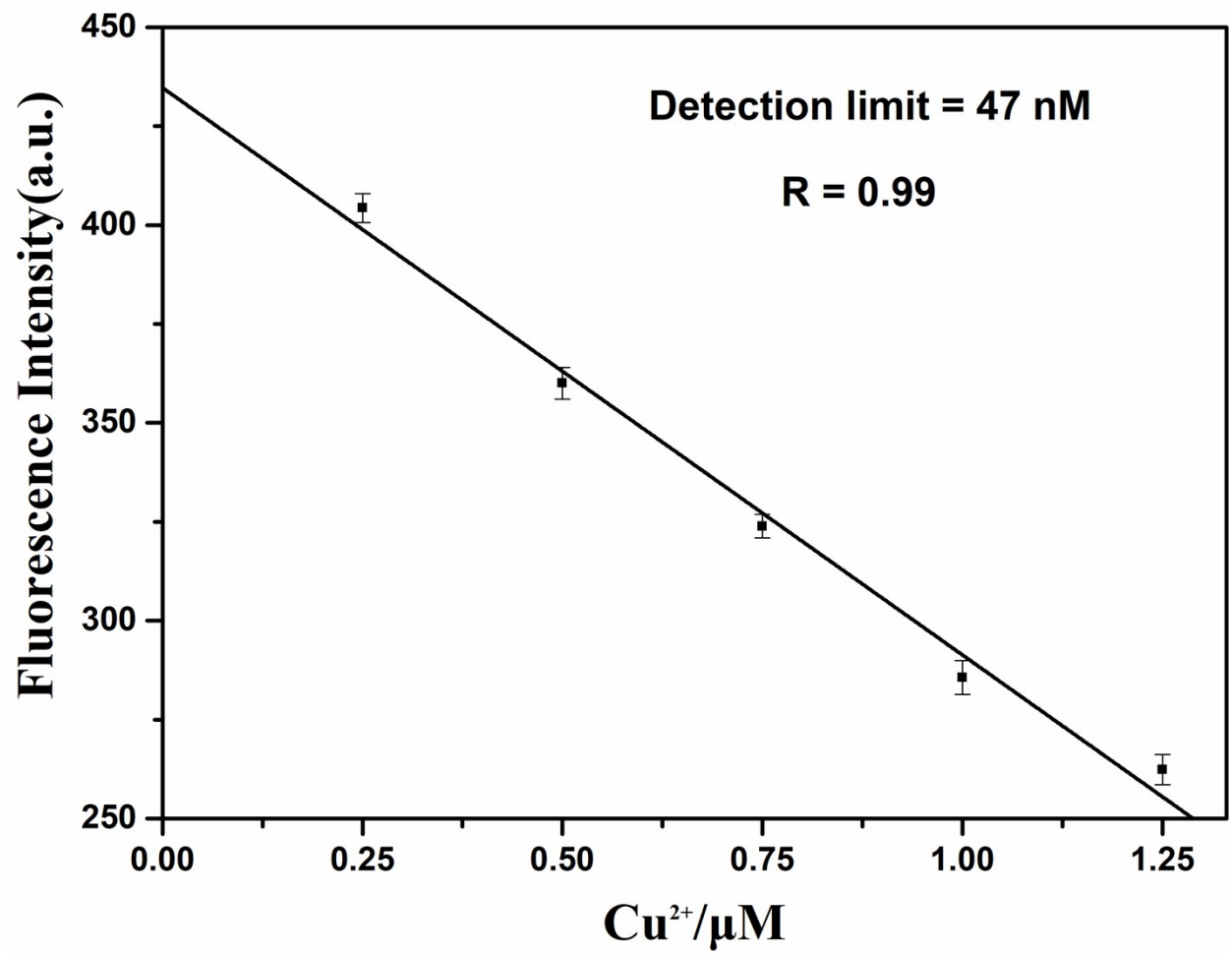

Figure S3. The changes of the fluorescence intensity monitored at the maximum fluorescence emission wavelength as a function of the concentration of Cu^{2+}. The detection limits of Cu^{2+} is 47 nM.

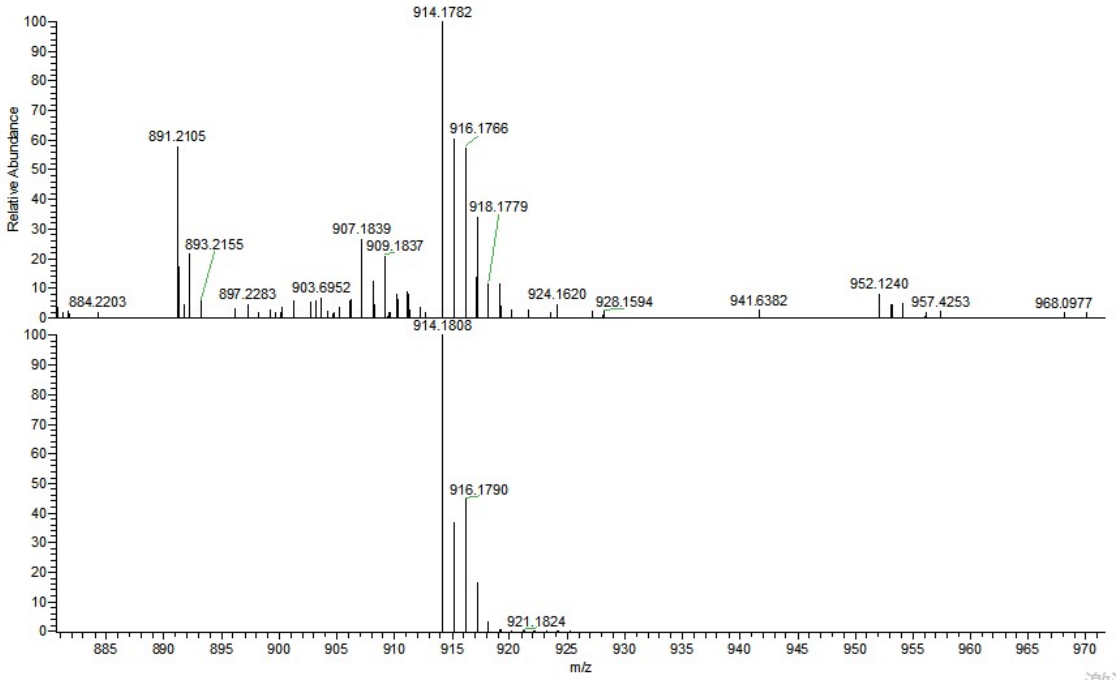

Figure S4. MS spectrum of [P+Cu^{2+}-2H^{+}].

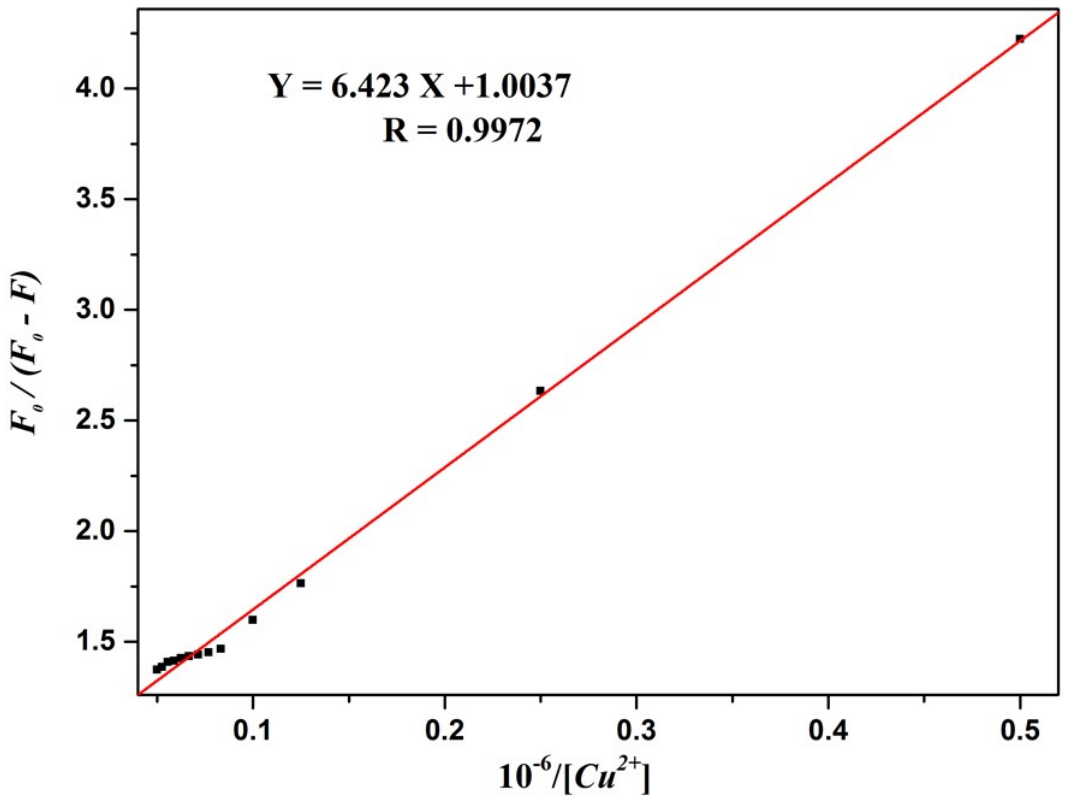

Figure S5. Fitting of fluorescence titration curve of P with Cu^{2+} in 10 mM HEPES buffer at pH 7.4. The binding constant is K_s=1.56 ×10^5 M^{-1}.

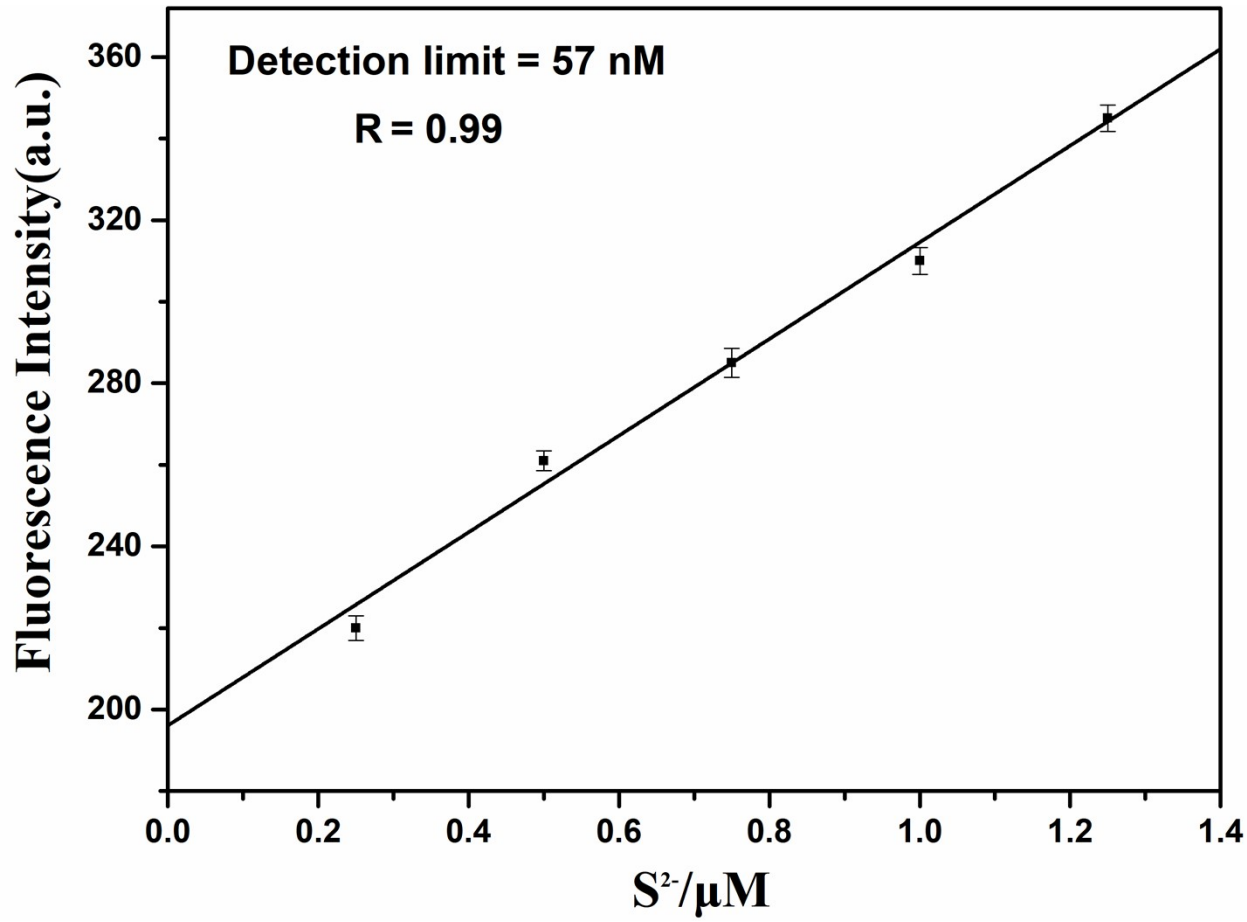

Figure S6. The changes of the fluorescence intensity monitored at the maximum fluorescence emission wavelength as a function of the concentration of S^{2-}. The detection limits of S^{2-} is 57 nM.

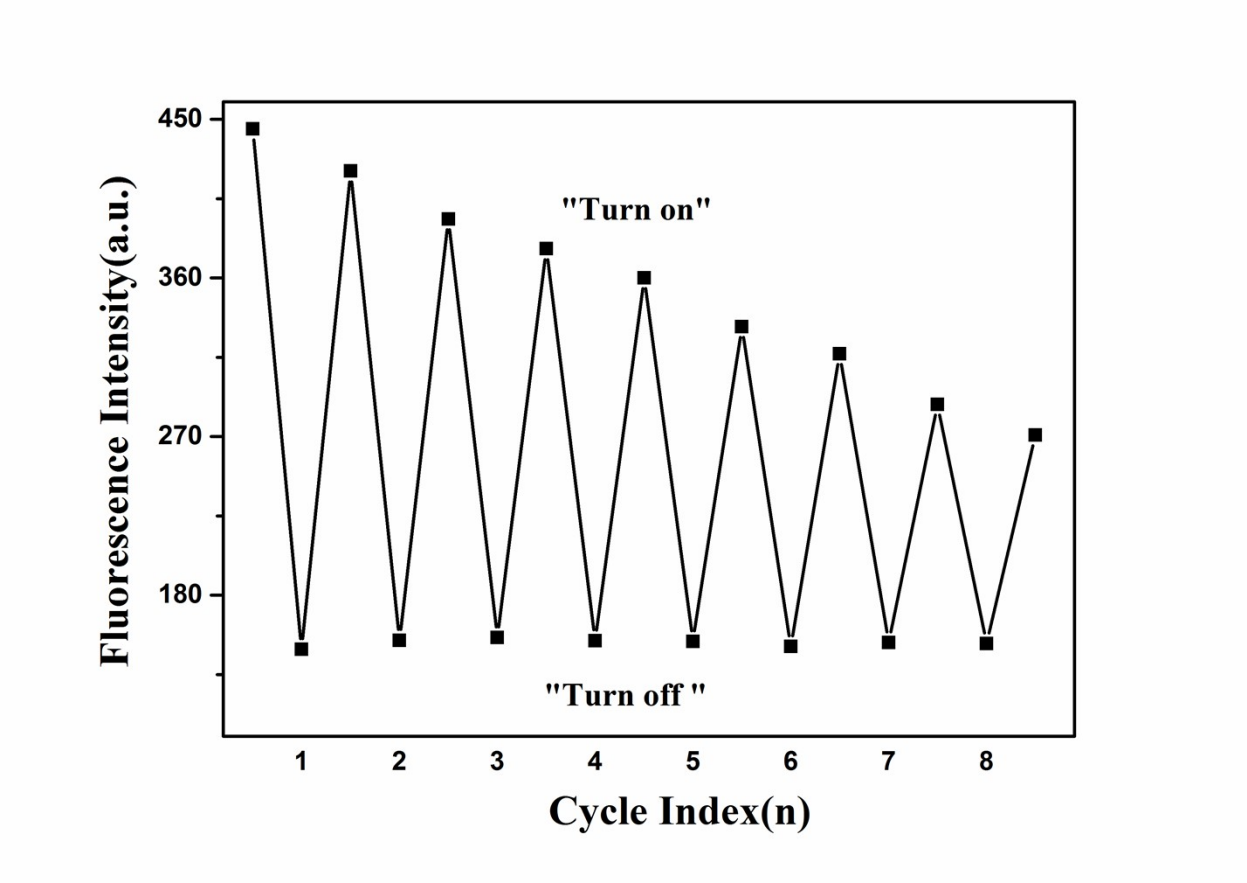

Figure S7. The cycle effect experiment with Cu^{2+} to S^{2-} in 10 mM HEPES buffer at pH 7.4.

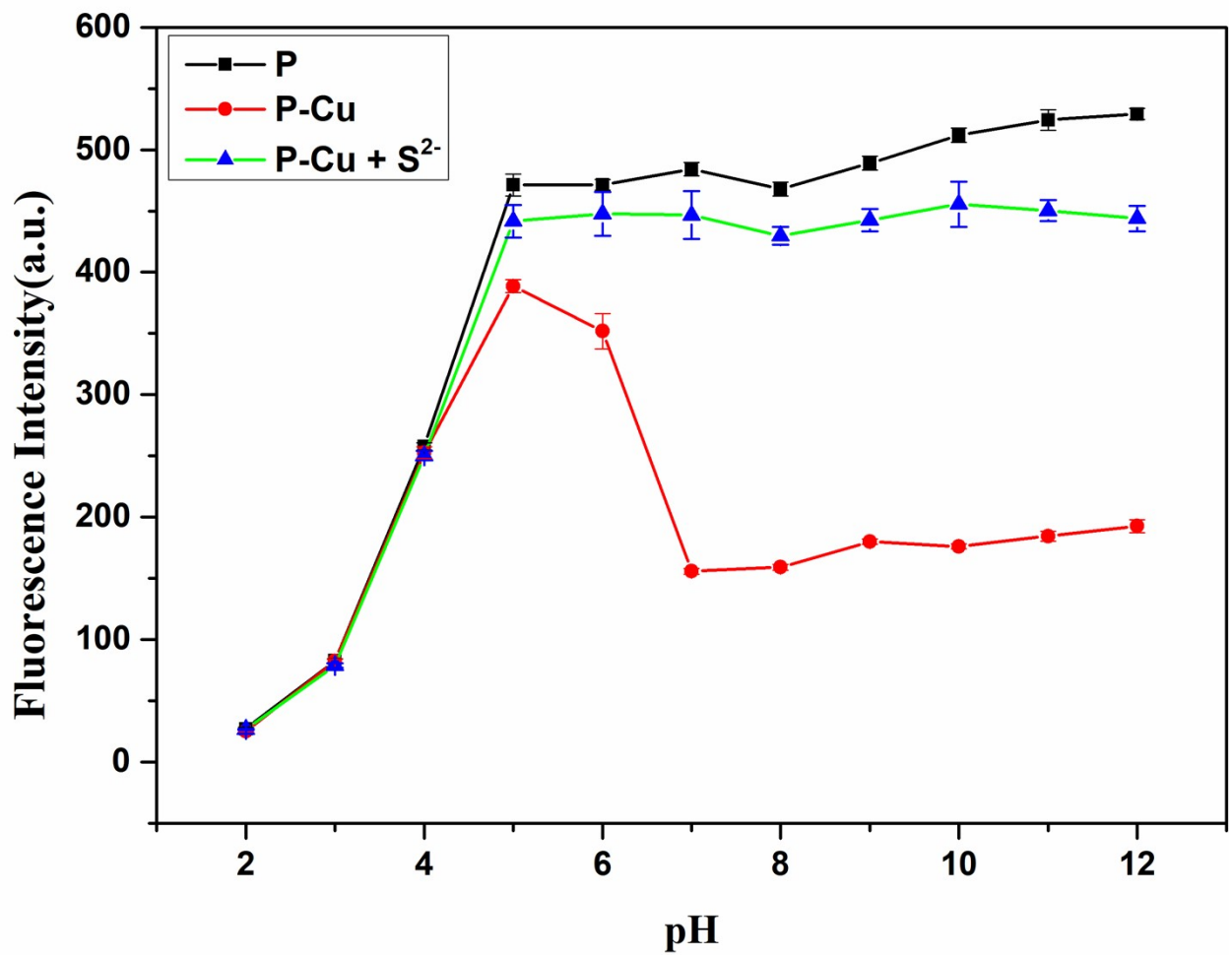

Figure S8. The pH influence on the fluorescence intensity of P in the absence (black line) and presence of Cu^{2+} (red line) and S^{2-} (blue line).

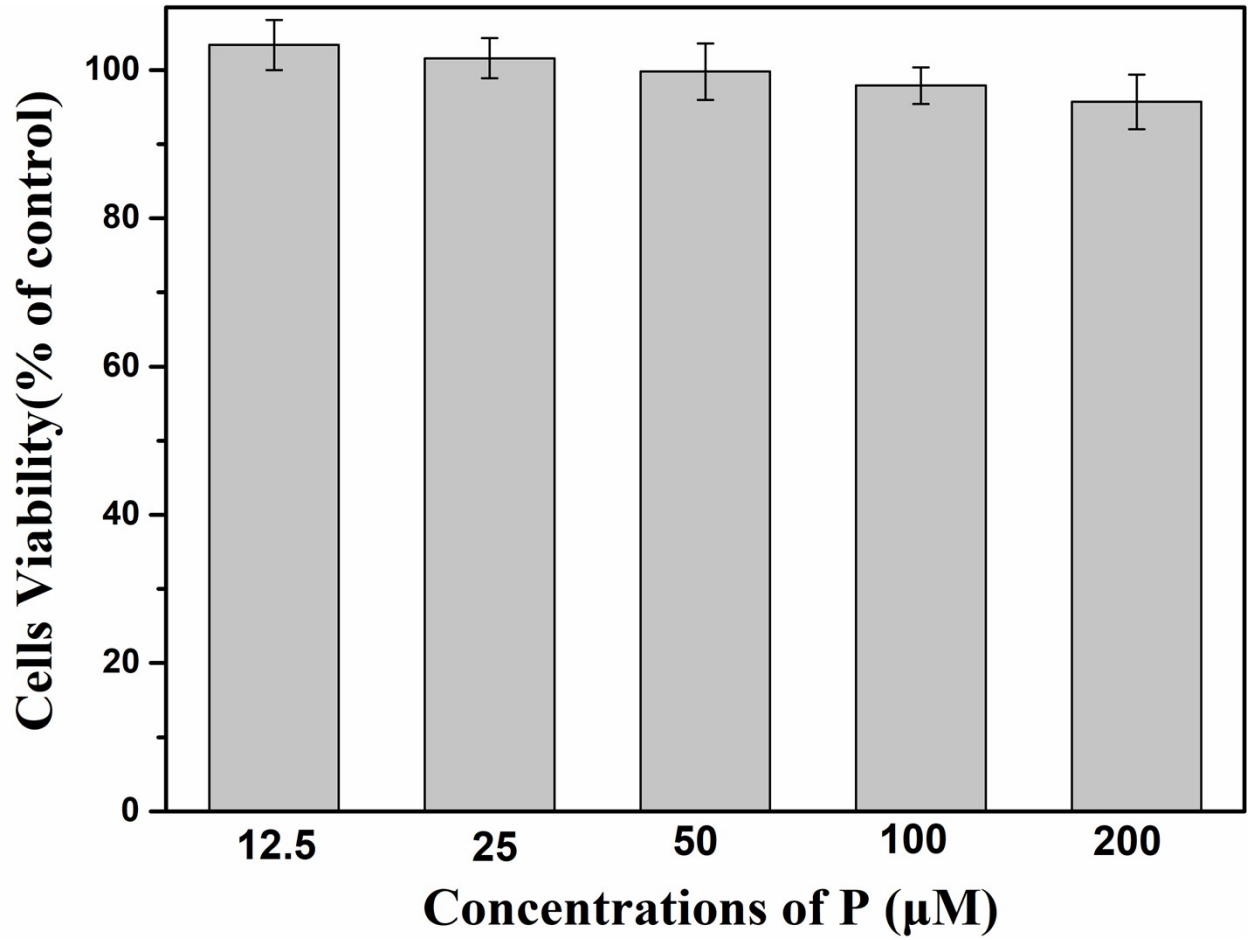

Figure S9. The CCK-8 assay of the fluorescent peptide probe P.